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# XPC Bios User Guide

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For the : SZ77R5

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Shuttle®

## XPC Installation Guide

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## Safety Information

Read the following precautions before setting up a Shuttle XPC.

### CAUTION

Incorrectly replacing the battery may damage this computer. Replace only with the same or equivalent as recommended by Shuttle. Disposal of used batteries according to the manufacturer's instructions.

### Laser compliance statement

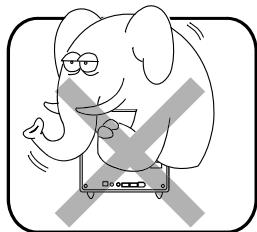
The optical disc drive in this server is a laser product. The drive's classification label is located on the drive.

### CLASS 1 LASER PRODUCT

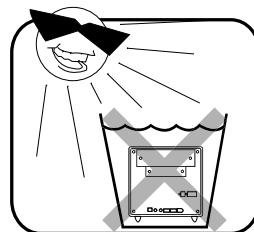
CAUTION : NVISIBLE LASER RADIATION WHEN OPEN.  
AVOID EXPOSURE TO BEAM.

## Installation Notices

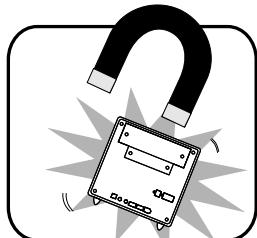
Do not place this device underneath heavy loads or in an unstable position.



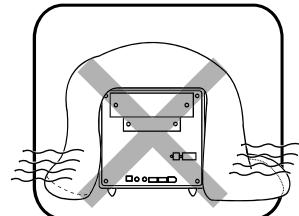
Do not expose this device to high levels of direct sunlight, high-humidity or wet conditions.



Do not use or expose this device around magnetic fields as magnetic interference may affect the performance of the device.



Do not block the air vents to this device or impede the airflow in any way.



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# Driver and Software Installation

## ■ Motherboard Driver DVD



The DVD contents attached in SZ77R5 Series motherboard are subject to change without notice.

The Motherboard Driver DVD contains all the motherboard drivers necessary to optimize the performance of this Shuttle Xvision in a Windows® OS. Install these drivers after installing Microsoft® Windows®.

Insert the attached DVD into your DVD-ROM drive. The DVD AutoRun screen should appear. If the AutoRun screen does not appear, double click on Autorun icon in My Computer to bring up Shuttle Mainboard Software Setup screen.

Navigation Bar Description :

- ☞ Auto Install Driver/ Utility.
- ☞ Install USB Charger for Mobile Device.
- ☞ User Manuals - Motherboard Manual, Quick Guide.
- ☞ Link to Shuttle Website - Link to shuttle website homepage.
- ☞ Browse this DVD - Allows you to see contents of this DVD.



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## ■ User Manuals

- ☞ Motherboard Manual
- ☞ Quick Guide



# Appendix

## Starting BIOS

AMIBIOS has been integrated into many motherboards for over a decade. In the past, people often referred to the AMIBIOS setup menu as BIOS, BIOS setup, or CMOS setup.

American Megatrends refers to this setup as BIOS. Specifically, it is the name of the AMIBIOS8 BIOS setup utility. This chapter describes the basic navigation of the BIOS setup screens.

### Enter the BIOS

To enter the BIOS setup screens, follow the steps below:

- Step1. Power on the motherboard.
- Step2. Press the <Delete> key on your keyboard when you see the following text prompt: **Press DEL to run Setup.**
- Step3. After you press the <Delete> key, the main BIOS setup menu displays. You can access the other setup screens from the main BIOS setup menu, such as the Chipset and Power menus.



This manual describes the standard look of the BIOS setup screen. The motherboard manufacturer has the ability to change any and all of the settings described in this manual. This means that some of the options described in this manual do not exist in your motherboard's AMIBIOS.



In most cases, the <Delete> key is used to invoke the BIOS setup screen. There are a few cases that other keys are used, such as <F1>,<F2>, and so on.

## BIOS Setup Menu

The main BIOS setup menu is the first screen that you can navigate. Each main BIOS setup menu option is described in this user's guide.

The Main BIOS setup menu screen has two main frames. The left frame displays all the options that can be configured. "Grayed-out" options cannot be configured. Options in blue can be.

The right frame displays the key legend. Above the key legend is an area reserved for a text message. When an option is selected in the left frame, it is highlighted in white.



AMIBIOS8 has default text messages built into it. The motherboard manufacture retains the option to include, leave out, or change any of these text messages. They can also add their own text messages. Because of this, many screen shots in this manual are different from your BIOS setup screen.

The BIOS setup/utility uses a key-based navigation system called hot keys. Most of the BIOS setup utility hot keys can be used at any time during the setup navigation process. These keys include **<F1>**, **<F10>**, **<Enter>**, **<ESC>**, **<Arrow>** keys, and so on.



There is a hot key legend located in the right frame on most BIOS setup screens.

Hot Key	Description
→ Left ← Right	The Left and Right <b>&lt;Arrow&gt;</b> keys allow you to select a BIOS setup screen. For example: Main screen, Advanced screen, Chipset screen, and so on.
↑ Up ↓ Down	The Up and Down <b>&lt;Arrow&gt;</b> keys allow you to select an BIOS setup item or sub-screen.
+- Plus/Minus	The Plus and Minus <b>&lt;Arrow&gt;</b> keys allow you to change the field value of a particular setup item. For example: Date and Time.
Tab	The <b>&lt;Tab&gt;</b> key allows you to select BIOS setup fields.
F1	The <b>&lt;F1&gt;</b> key allows you to display the General Help screen. Press the <b>&lt;F1&gt;</b> key to open the General Help screen.
F10	The <b>&lt;F10&gt;</b> key allows you to save any changes you have made and exit BIOS Setup. Press the <b>&lt;F10&gt;</b> key to save your changes. Press the <b>&lt;Enter&gt;</b> key to save the configuration and exit. You can also use the <b>&lt;Arrow&gt;</b> key to select Cancel and then press the <b>&lt;Enter&gt;</b> key to abort this function and return to the previous screen.
ESC	The <b>&lt;Esc&gt;</b> key allows you to discard any changes you have made and exit the BIOS Setup. Press the <b>&lt;Esc&gt;</b> key to exit the BIOS setup without saving your changes. Press the <b>&lt;Enter&gt;</b> key to discard changes and exit. You can also use the <b>&lt;Arrow&gt;</b> key to select Cancel and then press the <b>&lt;Enter&gt;</b> key to abort this function and return to the previous screen.
Enter	The <b>&lt;Enter&gt;</b> key allows you to display or change the setup option listed for a particular setup item. The <b>&lt;Enter&gt;</b> key can also allow you to display the setup sub-screens.



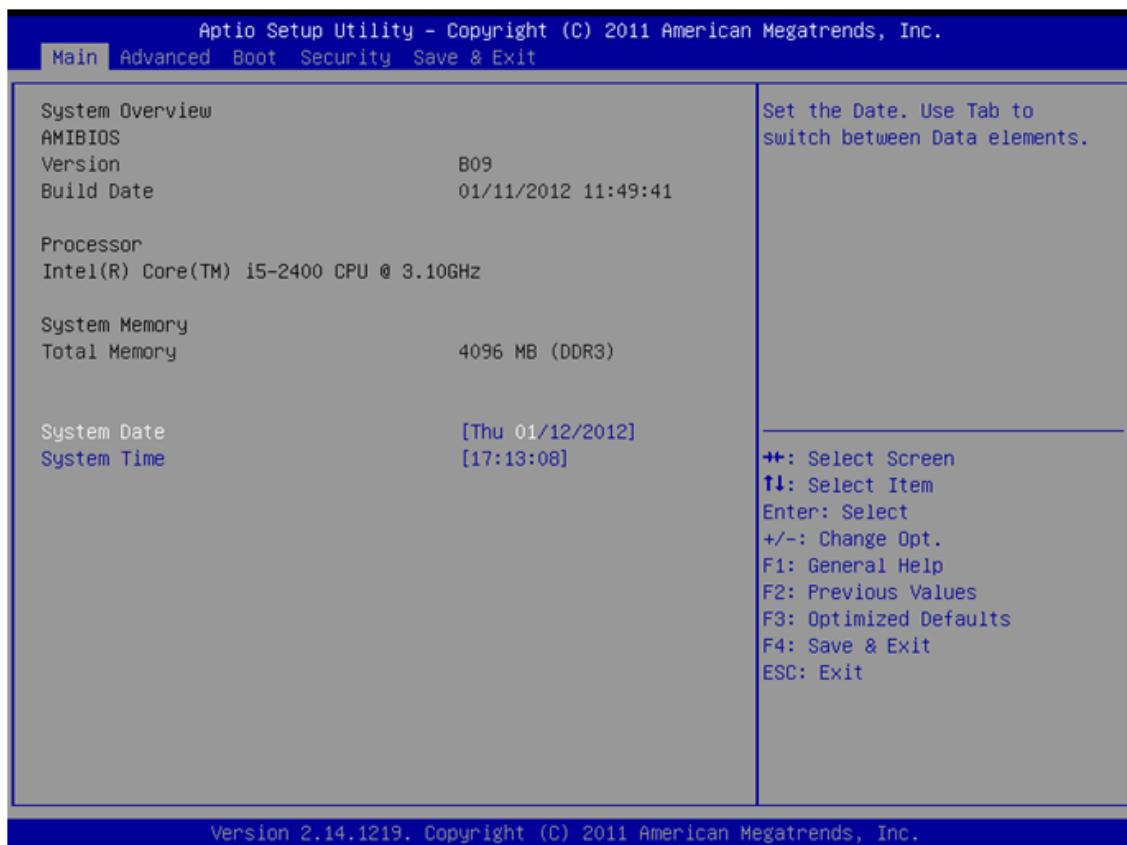
The **<F8>** key on your keyboard is the Fail-Safe key. It is not displayed on the BIOS key legend by default. To set the Fail-Safe settings of the BIOS, press the **<F8>** key on your keyboard. It is located on the upper row of a standard 101 keyboard. The Fail-Safe settings allow the motherboard to boot up with the least amount of options set. This can lessen the probability of conflicting settings.



## Main Setup

When you first enter the BIOS Setup Utility, you will enter the Main setup screen.

You can always return to the Main setup screen by selecting the Main tab. There are two Main Setup options. They are described in this section. The Main BIOS Setup screen is shown below.



### System Time/System Date

Use this option to change the system time and date. Highlight System Time or System Date using the <Arrow> keys. Enter new values through the keyboard. Press the <Tab> key or the <Arrow> keys to move between fields. The date must be entered in MM/DD/YY format. The time is entered in HH:MM:SS format.



The time is in 24-hour format. For example, 5:30 A.M. appears as 05:30:00, and 5:30 P.M. as 17:30:00.

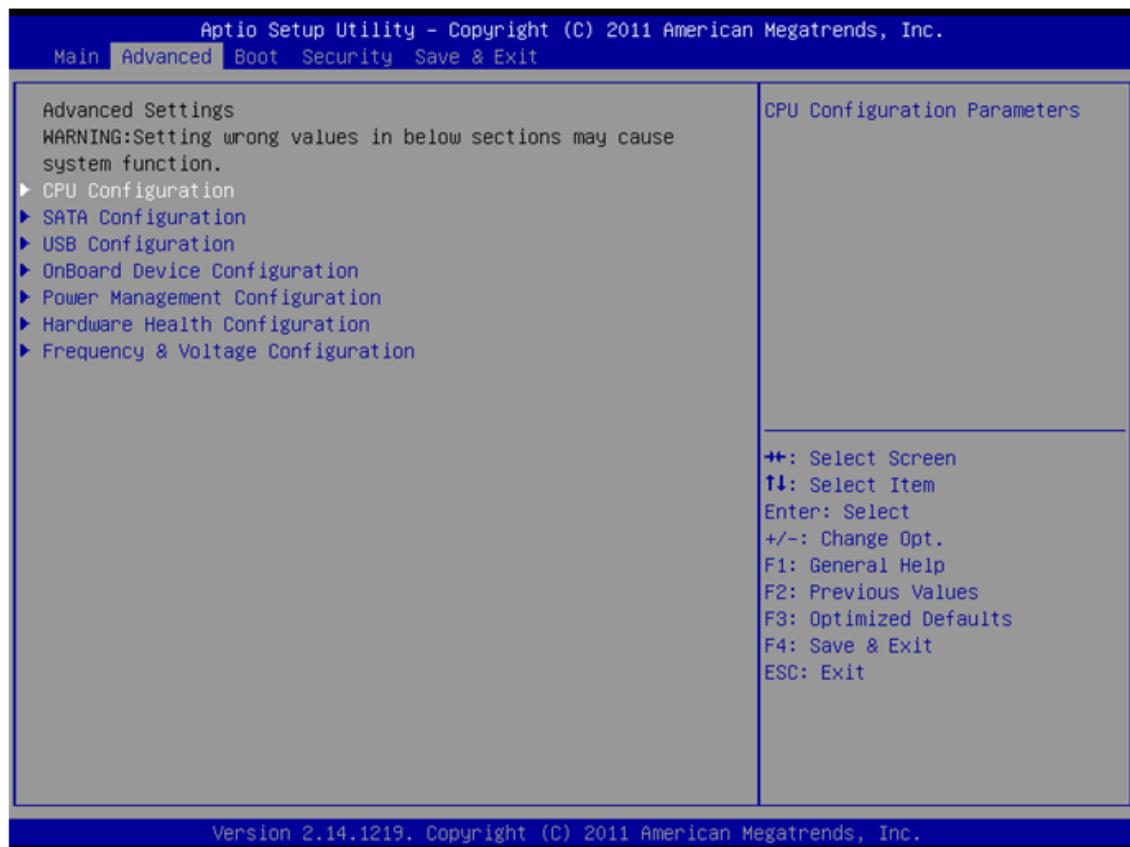


## Advanced

Select the Advanced tab from the BIOS setup screen to enter the Advanced BIOS Setup screen. You can select any of the items in the left frame of the screen, such as CPU Configuration, to go to the sub menu for that item.

You can display an Advanced BIOS Setup option by highlighting it using the <Arrow> keys. All Advanced BIOS Setup options are described in this section.

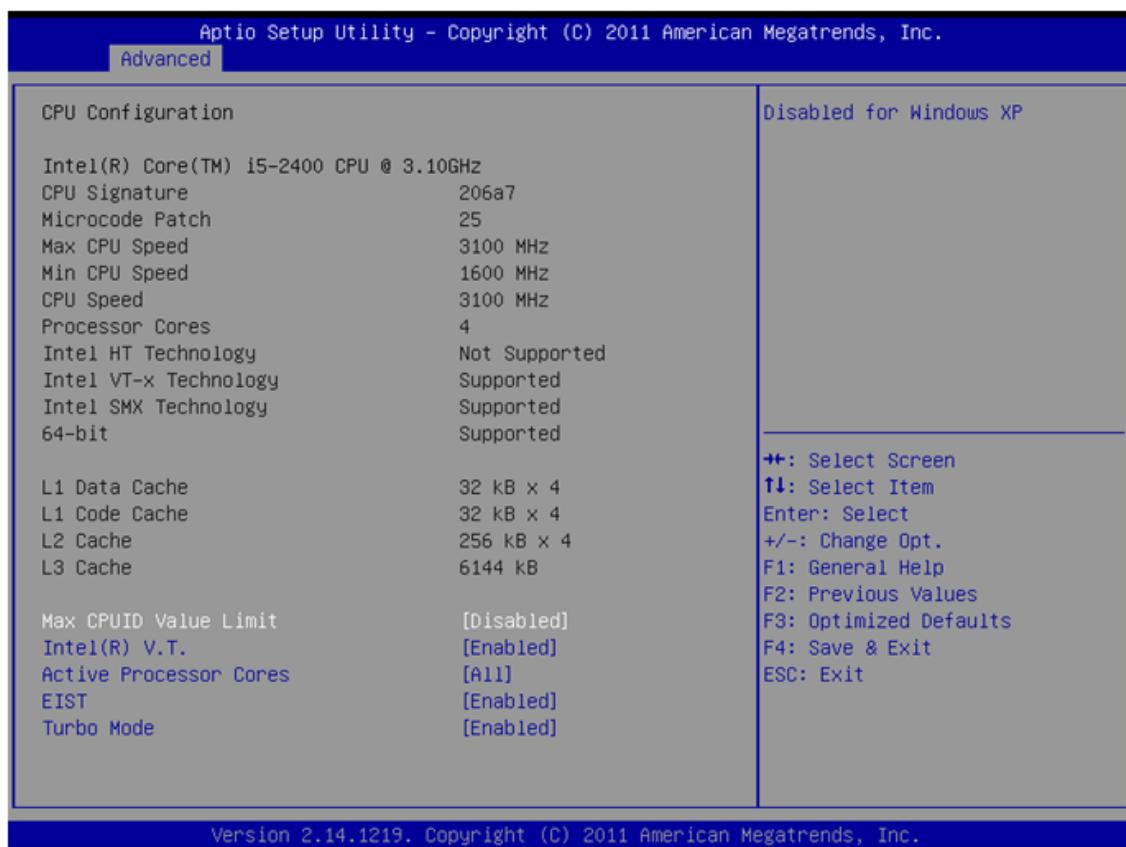
The Advanced BIOS Setup screen is shown below. The sub menus are described on the following pages.



## ➤ CPU Configuration

You can use this screen to select options for the CPU Configuration Settings. Use the up and down <Arrow> keys to select an item. Use the <Plus> and <Minus> keys to change the value of the selected option. A description of the selected item appears on the right side of the screen. The settings are described on the following pages. An example of the CPU Configuration screen is shown below.

**⚠** The CPU Configuration setup screen varies depending on the installed processor.



### **Max CPUID Value Limit**

This item allows you to enable or disable the Max CPUID Value Limit. For Prescott CPU only, some OSes (ex. NT4.0) cannot handle the function with disable. This should be enabled in order to boot legacy OSes that cannot support CPUs with extended CPUID functions.

Set Limit CPUID MaxVal to 3, Should Be "Disabled" for WinXp.

➤ The choice: Enabled or Disabled.



Some older O.S.'s (Win98, WinMe..) cannot handle a CPUID MaxVal greater than 3. Please choose "Enabled" if you use one of those O.S. If your O.S. is WinXP or Win2000, we suggest you "Disabled" the item.

### **Intel(R) V. T.**

When enable, a VMM can utilize the additional hardware capabilities provided by vanderpool Technology.

➤ The choice: Enabled , Disabled.



CPU support, item appear.

### **Active Processor Cores**

This item allows you to determine how many cores to be enabled.

➤ The choice: ALL,1,2,3.

### **EIST**

This item allows you to enable or disable Enhanced Intel SpeedStep® Technology.

➤ The choice: Enabled , Disabled.

### **Turbo Mode**

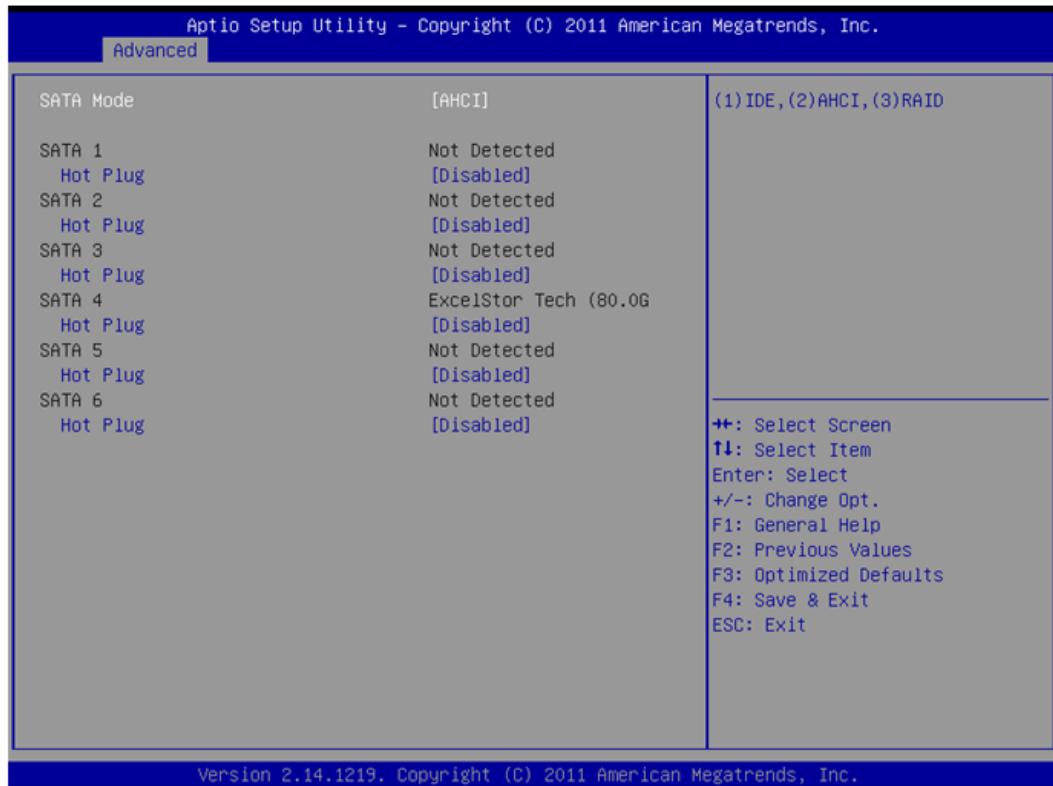
This item allows you to enable or disable Intel® Turbo Boost Technology.

➤ The choice: Enabled , Disabled.



The CPU Configuration setup screen varies depending on the installed processor.

➤ **SATA Configuration**



**SATA Mode**

This item allows you to set the SATA Mode.

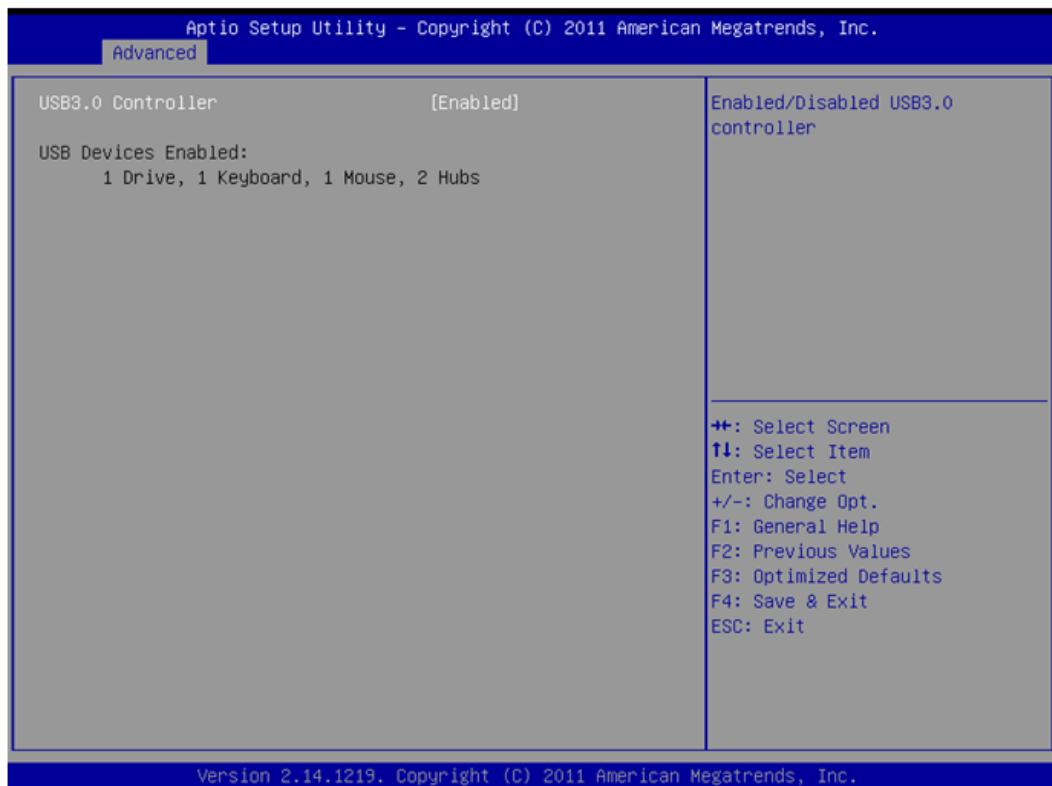
➤ The choice: IDE , AHCI or RAID.

**Hot Plug**

This item allows you to enable or disable Hot Plug capability.

➤ The choice: Enabled , Disabled.

➤ **USB Configuration**



**USB 3.0 Controller**

This item allows you to enable or disable USB 3.0 Controller.

➤ The choice: Enabled , Disabled.

## ➤ Onboard Device Configuration



### PCIe x4 Speed

This item allows user to adjust PCI Express port speed.

- The choice: Gen1, Gen2.

### High Definition Audio

This item allows you to enable or disable system High Definition Audio.

- The choice: Enabled , Disabled.

### Onboard LAN Function

This item allows you to enable or disable LAN Function.

- The choice: Enabled , Disabled.

### Onboard LAN BOOT ROM

This item allows you to enable or disable Onboard LAN BOOT ROM.

- The choice: Enabled , Disabled.

### Mini-PCIE/mSATA Select

This item allows user to select Mini-PCIE or mSATA port.

- The choice: mini pcie, SATA.

## **Initiate Graphic Adapter**

Select which graphics controller to use as the primary boot device.

Set Initiate Graphic Adapter to "SG" and enable Multi-Monitor feature.

- The choice: auto, PCIE, onboard, SG.

## **IGD Graphics Memory Size Select**

Allows you to select the size of system memory used by the internal graphics device.

- The choice: 32MB, 64MB, 128MB, 256MB, 512MB.

## **Serial Port Configuration Controller**

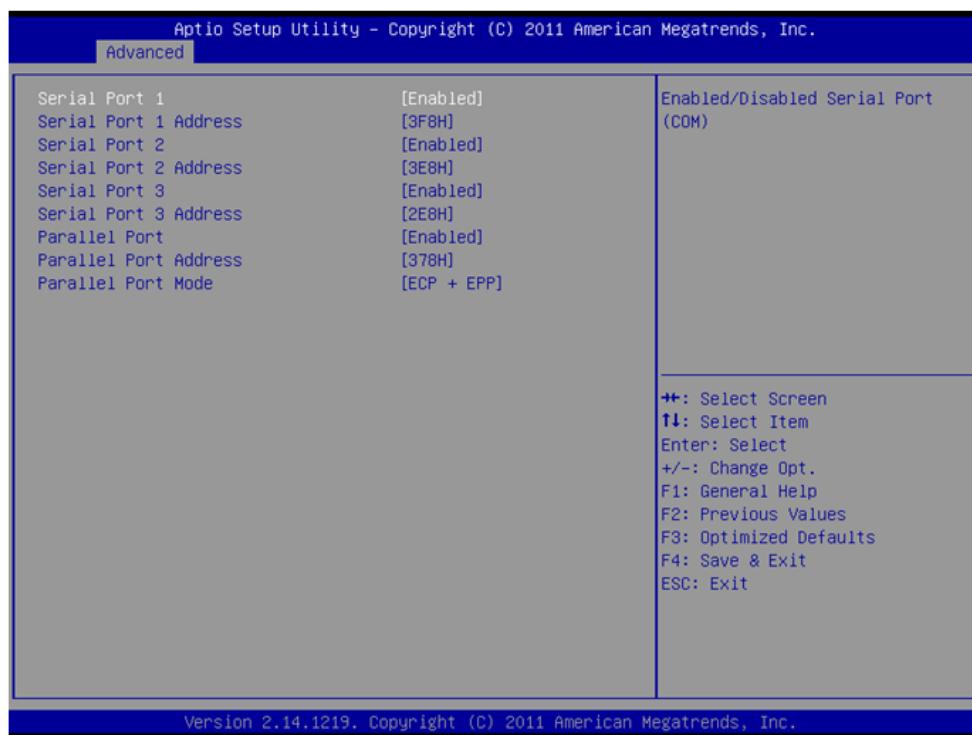
Options are in its sub-menu.

Press<Enter>to enter the sub-menu of detailed options.

### **Serial Port 1**

This item allows you to enable or disable Serial Port.

- The choice: Enabled, Disabled.

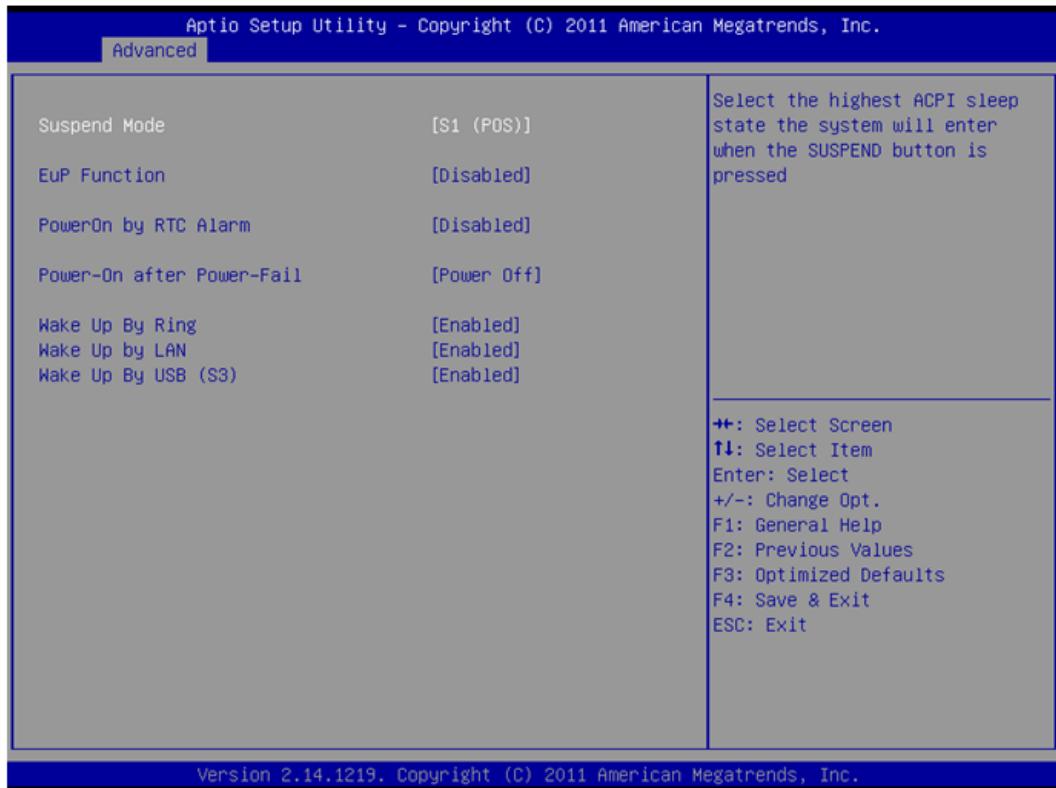


## **CIR Controller**

This item allows you to enable or disable CIR Controller.

- The choice: Enabled, Disabled.

## ➤ Power Management Configuration



### Suspend mode

Select the highest ACPI Sleep state the system will enter when the SUSPEND button is pressed.

- The choice: S1 (POS), S3 (STR).

### EuP Function

This item allows you to enable or disable system EuP function in S4/S5.

- The choice: Enabled , Disabled.

### PowerOn by RTC Alarm

When enabled, System will wake on the hr::min::sec specified.

- The choice: Enabled , Disabled.

### PowerOn after Power-Fail

This item allows you to set system power on automatically after AC power restored.

- The choice: Power On, Former-sts, Power Off .

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### **Wake Up By Ring**

This item allows you to enable or disable system wake up by Ring.

- The choice: Enabled , Disabled.

### **Wake Up By LAN**

This item allows you to enable or disable system wake on by onboard LAN chip.

- The choice: Enabled , Disabled.

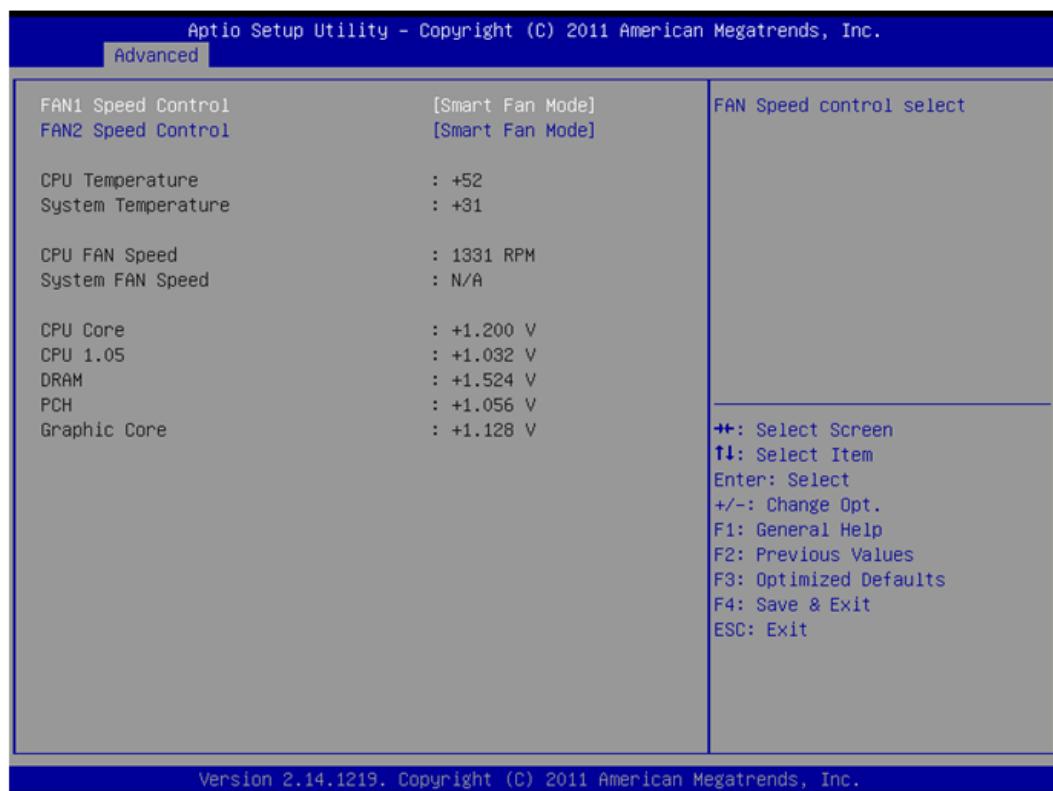
### **Wake Up By USB (S3)**

This item allows you to enable or disable system wake up by USB (S3).

- The choice: Enabled , Disabled.



## Hardware Health Configuration



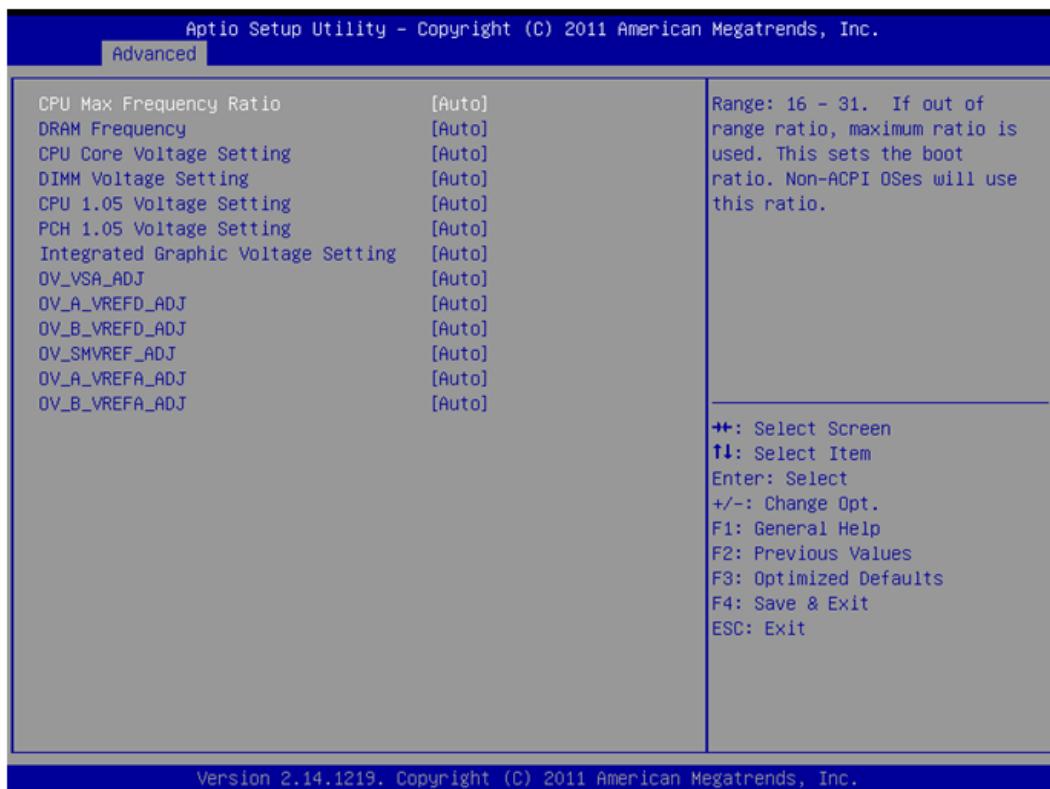
### Fan1/Fan2 Speed Control

This item allows you to set CPU Fan Speed.

- The choice: Smart Fan Mode, Ultra-Low Speed, Low Speed, Mid Speed, Full Speed.



## Frequency & Voltage Configuration



### CPU Max Frequency Ratio

Non Turbo Range. If out of range ratio, maximum or minimum is used. This sets the maximum ratio.

- The choice: Auto, Manual

### DRAM Frequency

This item allows user to adjust DRAM Frequency.

- The choice: Auto, 1066mhz, 1333mhz, 1600mhz.

### CPU Core Voltage Setting

This item allows user to adjust CPU Core Voltage parameter.

- The choice: Auto, +50mv, +100mv, +150mv, +200mv, +250mv, +300mv

### DIMM Voltage Setting

This item allows user to adjust DIMM Voltage parameter.

- The choice: Auto, +50mv, +100mv, +150mv, +200mv, +250mv, +300mv

### **CPU 1.05 Voltage Setting**

This item allows user to adjust CPU 1.05 Voltage parameter.

- The choice: Auto, +50mv, +100mv, +150mv, +200mv, +250mv, +300mv

### **PCH 1.05 Voltage Setting**

This item allows user to adjust PCH 1.05 Voltage parameter.

- The choice: Auto, +50mv, +100mv, +150mv, +200mv, +250mv, +300mv

### **Integrated Graphic Voltage Setting**

This item allows user to adjust Integrated Graphic Voltage.

- The choice: Auto, +50mv, +100mv, +150mv, +200mv, +250mv, +300mv

### **OV\_VSA\_ADJ**

This item allows user to adjust OV\_VSA\_ADJ parameter.

- The choice: Auto, +50mv, +100mv

### **OV\_A\_VREFD\_ADJ**

This item allows user to adjust OV\_A\_VREFD\_ADJ parameter.

- The choice: Auto, +50mv, +100mv, +150mv, +200mv, +250mv, +300mv

### **OV\_B\_VREFD\_ADJ**

This item allows user to adjust OV\_B\_VREFD\_ADJ parameter.

- The choice: Auto, +50mv, +100mv, +150mv, +200mv, +250mv, +300mv

### **OV\_SMVREF\_ADJ**

This item allows user to adjust OV\_SMVREF\_ADJ parameter.

- The choice: Auto, +50mv, +100mv, +150mv, +200mv, +250mv, +300mv

### **OV\_A\_VREFA\_ADJ**

This item allows user to adjust OV\_A\_VREFA\_ADJ parameter.

- The choice: Auto, +50mv, +100mv, +150mv, +200mv, +250mv, +300mv

### **OV\_B\_VREFA\_ADJ**

This item allows user to adjust OV\_B\_VREFA\_ADJ parameter.

- The choice: Auto, +50mv, +100mv, +150mv, +200mv, +250mv, +300mv

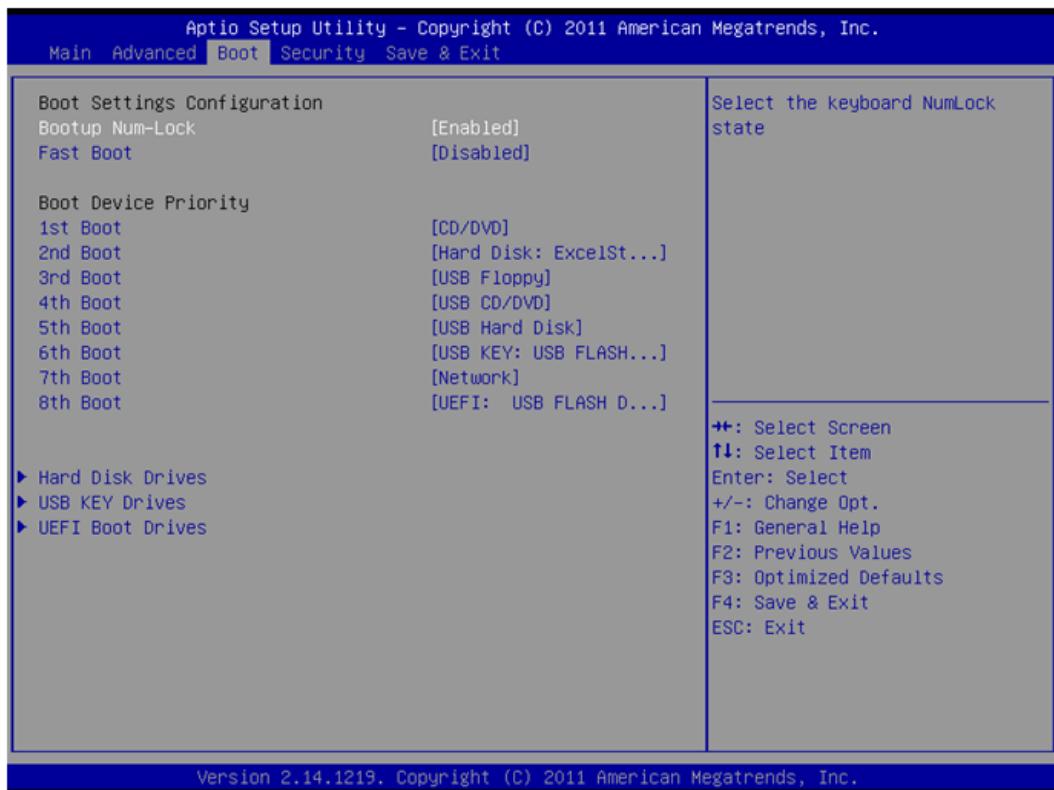


## Boot

Select the Boot tab from the BIOS setup screen to enter the Boot BIOS Setup screen. You can select any of the items in the left frame of the screen, such as Boot Settings Configuration, to go to the sub menu for that item.

You can display an Boot BIOS Setup option by highlighting it using the <Arrow> keys. All Boot BIOS Setup options are described in this section.

The Boot BIOS Setup screen is shown below. The sub menus are described on the following pages.



### Bootup Num-Lock

This item allows you to enable or disable keyboard Num-Lock state.

- The choice: Enabled, Disabled.

### Fast Boot

This item allows you to enable or disable Fast Boot function.

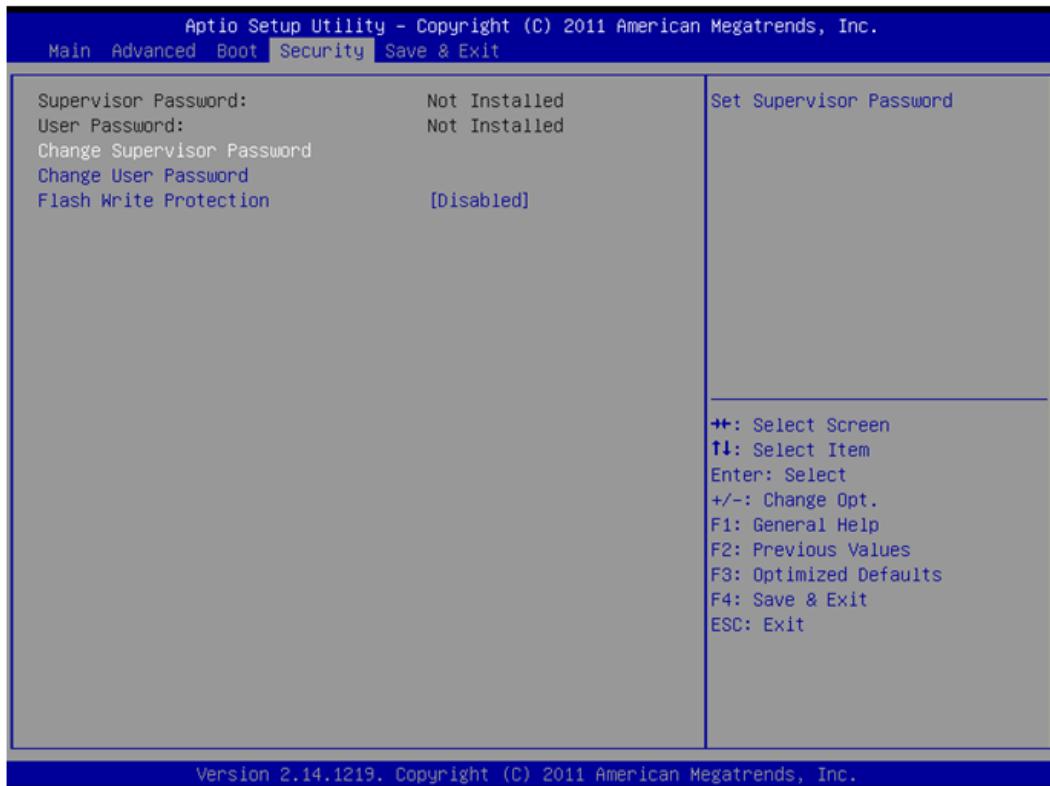
- The choice: Enabled, Disabled.



## Security

Select the Security tab from the BIOS setup screen to enter the Security BIOS Setup screen. You can display an Security BIOS Setup option by highlighting it using the <Arrow> keys. All Security BIOS Setup options are described in this section.

The Security Setup screen is shown below. The sub menus are documented on the following pages.



### Supervisor Password

Indicates whether a supervisor password has been set. If the password has been installed, Installed displays. If not, Not Installed displays.

### User Password

Indicates whether a user password has been set. If the password has been installed, Installed displays. If not, Not Installed displays.

### Change Supervisor Password

Select Change Supervisor Password from the Security Setup menu and press <Enter>.

Enter New Password:

appears. Type the password and press <Enter>. The screen does not display the characters entered. Retype the password as prompted and press <Enter>. If the password confirmation is incorrect, an error message appears. The password is stored in NVRAM after BIOS completes.

### **Change User Password**

Select Change User Password from the Security Setup menu and press <Enter>.

Enter New Password:

appears. Type the password and press <Enter>. The screen does not display the characters entered. Retype the password as prompted and press <Enter>. If the password confirmation is incorrect, an error message appears. The password is stored in NVRAM after BIOS completes.

### **Flash Write Protection**

Choose [Enabled] to avoid virus destroy BIOS. If you want to flash BIOS, you must set it [Disabled].

➤ The choice: Enabled or Disabled.

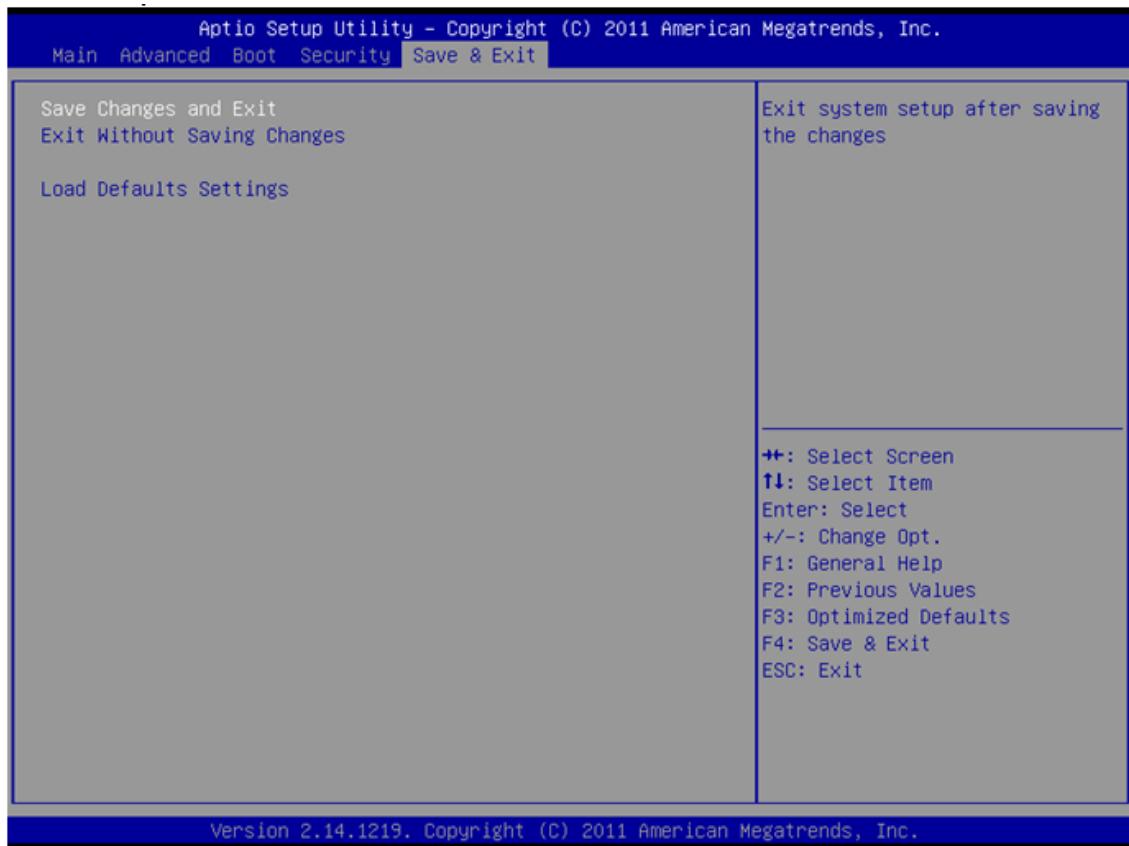


## Save & Exit

Select the Exit tab from the BIOS setup screen to enter the Exit BIOS Setup screen.

You can display an Exit BIOS Setup option by highlighting it using the <Arrow> keys. All Exit BIOS Setup options are described in this section.

The Exit BIOS Setup screen is shown below.



### **Save Changes and Exit**

When you have completed the system configuration changes, select this option to leave BIOS Setup and reboot the computer so the new system configuration parameters can take effect.

Select "Save Changes and Exit" from the Exit menu and press <Enter>.

Save Configuration Changes and Exit Now?

[Ok] [Cancel]

appears in the window. Select Ok to save changes and exit.

### **Exit Without Saving Changes**

Select "Exit without Saving Changes" from the Exit menu and press <Enter>.

Select Ok to discard changes and Exit.

### **Load Defaults Settings**

BIOS automatically sets all BIOS Setup options to a complete set of default settings when you Select this option. The Optimal settings are designed for maximum system performance, but may not work best for all computer applications. In particular, do not use the Optimal BIOS Setup options if your computer is experiencing system configuration problems.

Select Load Optimal Defaults from the Exit menu and press <Enter>.

Select Ok to load optimal defaults.